

**Notice of Allowability**

Application No.

10/783,057

Examiner

JANET L. SUGLO

Applicant(s)

FUJIWARA ET AL.

Art Unit

2857

**- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed July 20, 2009.
2. ☒ The allowed claim(s) is/are 1-5, 7, 8 and 10-14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 11/17/09
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 11/17/09
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

### **DETAILED ACTION**

#### ***Response to Amendment***

1. The action is responsive to the Amendment filed on July 20, 2009. Claims 1-5, 7, 8 and 10-14 are pending. Claims 1 and 4 have been amended. Claims 6 and 9 have been cancelled. Claim 14 is new.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin Goodman (Reg. No. 63,864) on November 17, 2009.

The application has been amended as follows:

**Claim 1, line 12**, currently states

"least a position that is actually repaired, and to correct the received defect"

And is hereby amended to state

--least a position that is actually repaired; and

the liquid crystal repair device operable to correct the received defect--

**Claim 4, line 3**, currently states

“causing a liquid crystal testing device to determine whether at”

And is hereby amended to state

--determining with a liquid crystal testing device whether at--

**Claim 4, line 8**, currently states

“causing a liquid crystal repair device to receive the defect”

And is hereby amended to state

--receiving with a liquid crystal repair device the defect--

**Claim 4, line 9**, currently states

“information from the database, to repair the defect based on the received defect”

And is hereby amended to state

--information from a database, to repair the defect based on the received defect--

**Claim 4, line 13**, currently states

“causing the liquid crystal repair device to correct the received defect”

And is hereby amended to state

--correcting with the liquid crystal repair device the received defect--

**Claim 4, line 20**, currently states

“redetermining the presence of the defect based on comparison between  
the”

And is hereby amended to state

--redetermining with a data management section the presence of the  
defect based on comparison between the--

**Claim 14, line 11**, currently states

“actually repaired, and to correct the received defect information in a case  
where the”

And is hereby amended to state

--actually repaired; and  
the liquid crystal repair device operable to correct the received  
defect information in a case where the--

**Claim 14, line 13**, currently states

“and generate corrected defect information, wherein”

And is hereby amended to state

--and generate corrected defect information;--

**Claim 14, line 14**, currently states

"said data management section is operable to record, in the database,  
the"

And is hereby amended to state

--wherein said data management section is operable to record, in the  
database, the--

**Claim 14, line 17**, currently states

"said data management section is operable to update the defect  
information"

And is hereby amended to state

--wherein said data management section is operable to update the defect  
information--

***Allowable Subject Matter***

3. **Claims 1-5, 7, 8 and 10-14** are allowed.
4. The following is an examiner's statement of reasons for allowance:  
Lee et al. (US Patent 6,473,664) teaches a manufacturing process automation system using a file server. A first machine tests the substrate and a second machine repairs the substrate (Figure 1). The results from the first machine are sent to the first disk which then relays the information to the second machine (Figure 4). The second machine uses the result information from the first machine to repair the substrate (col 5,

In 46-50) and then sends the repair information to the server (col 5, ln 51-55). The repairer does not correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information.

Dow et al. (US Patent 5,351,247) teaches an adaptive fault identification system. Substrates are tested and then repaired. The substrates are then retested to see if the repair was successful (col 8, ln 53-67). The substrate follows a pattern of test, repair and repeat; there is no need to test the substrate twice before the repair operation. The repairer does not correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information.

**Claims 1-3, 7, 8, and 12** are allowable because the combination of limitations including an apparatus for managing a liquid crystal substrate, comprising: a data management section; a liquid crystal testing device operable to determine if there is a defect and to send the defect information to the data management section; a liquid crystal repair device operable to receive the defect information from the data management section, to repair the defect, to send the repair information to the data management section; and *the liquid crystal repair device operable to correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information*; said data management section operable to record the defect information and the repair information; said data management section operable

to redetermine the presence of the defect based on the comparison; said data management section operable to update the defect information recorded in said database with the corrected defect information are not found, taught or suggested in the prior art of record.

**Claims 4, 5, 10, 11 and 13** are allowable because the combination of limitations including a method for managing a liquid crystal substrate comprising: determining with a tester whether a substrate has a defect; receiving defect information from the testing device; receiving with a repair device the defect information to repair the defect; receiving from the repair device repair information; *correcting with the liquid crystal repair device the received defect information in a case where the received defect information contains incorrect information with regard to the defect, and to generate corrected defect information as a part of the repair information*; redetermining with a data management section the presence of the defect based on a comparison between the defect information and the repair information; and updating the defect information with the corrected defect information are not found, taught or suggested in the prior art of record.

**Claim 14** is allowable because the combination of limitations including an apparatus for managing a liquid crystal substrate comprising; a data management section; a liquid crystal testing device operable to determine whether the substrate has a defect and to send the defect information to the data management section; a liquid crystal repair device operable to receive the defect information from the data management section and repair the substrate based on the defect information and to

send repair information to the data management section; *the liquid crystal repair device operable to correct the received defect information in a case where the received defect information contains incorrect information with regard to the defect and generate corrected defect information as a part of the repair information*; said data management section operable to record the defect information and the repair information; said data management section operable to update the defect information recorded in said database with the corrected defect information are not found, taught or suggested in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANET L. SUGLO whose telephone number is (571)272-8584. The examiner can normally be reached on M-F from 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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